

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Final Office Action dated July 1, 2009 has been received and its contents carefully reviewed.

Claims 1, 7, 11 and 16-18 are hereby amended. Claims 2, 3 and 15 are cancelled and claims 4, 12 and 20-28 were previously cancelled. Accordingly, claims 1, 5-11, 13-14 and 16-19 are currently pending. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, claims 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Naito (US Patent 6,462,735, hereinafter referred as Naito), and claims 1-3, 5-10, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito in view of Kang (U.S. Pub. No. 2002/0063666, hereinafter referred as Kang).

The rejection of claims 11, 13 and 14 under 35U.S.C. 102(b) as being anticipated by Naito is respectfully traversed and reconsideration is requested.

Applicants respectfully submit that claims 11, 13 and 14 are patentable over Naito. Claim 11 recites a method of driving an electro-luminescence display device comprising a combination of elements including, for example, “receiving Red, Green and Blue N-bit digital data signals having a same gray scale value; converting the Red, Green and Blue N-bit digital data signal into Red, Green and Blue M-bit digital data signals, respectively using a timing controller, wherein each of N and M is an integer, M is greater than N, and gray scale values of the Red, Green and Blue M-bit digital data signals are different from each other; generating a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals; generating Red, Green and Blue analog data signals corresponding to the plurality of gamma voltages; and applying the Red, Green and Blue analog data signals to respective Red, Green and Blue pixels, wherein each of Red, Green and Blue pixels includes a cell which has a cathode electrode, an anode electrode and an emitting layer disposed between the cathode electrode and the anode electrode”.

As Applicants have presented above, claim 11, and claims 13 and 14 that depend from claim 11 are not anticipated by Naito. Naito fails to teach or suggest at least these features of the claimed invention. For example, the claimed invention recites “converting the Red, Green

and Blue N-bit digital data signal into Red, Green and Blue M-bit digital data signals, respectively using a timing controller, wherein each of N and M is an integer, M is greater than N, and gray scale values of the Red, Green and Blue M-bit digital data signals are different from each other; generating a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals; generating Red, Green and Blue analog data signals corresponding to the plurality of gamma voltages”. Although Naito discloses conversion table (column 11, lines 12-23) which is read as the “look up table” by the Examiner, this conversion table of Naito fails to disclose that the data conversion is performed by a timing controller.

Also, Naito fails to disclose “generating Red, Green and Blue analog data signals corresponding to the plurality of gamma voltages”. Naito discloses a digital gamma correction circuit 220 shown in Fig. 2. Accordingly, Naito fails to teach the features of the claimed invention because it is impossible to convert a digital data into an analog data.

Lastly, Naito fails to disclose that each of Red, Green and Blue pixels including a cell which has a cathode electrode, an anode electrode and an emitting layer disposed between the cathode electrode and the anode electrode.

Accordingly, Applicants respectfully submit that claims 11, 13 and 14 are not anticipated by Naito.

The rejection of claims 1-3, 5-10, and 16-19 under 35 U.S.C. 103(a) as being unpatentable over Naito in view of Kang is respectfully traversed and reconsideration is requested.

Applicants respectfully submit that claims 1, 5-10 and 16-19 are patentable over Naito in view of Kang. Claim 1 recites an electro-luminescence display device comprising a combination of elements including, for example, “R, G and B cells having different light-emission efficiencies, wherein each of the R, G and B cells has a cathode electrode, an anode electrode and an emitting layer disposed between the cathode electrode and the anode electrode; a timing controller for generating a gate control signal and a data control signal, wherein the timing controller includes a look-up table which receives Red, Green and Blue N-bit digital data signals having a same gray scale value, and converts the Red, Green and Blue N-bit digital data signals into Red, Green and Blue M-bit digital data signals respectively, wherein each of N and M is an integer, M is greater than N, and gray scale

values of the Red, Green and Blue M-bit digital data signals are different from each other; a gamma voltage generator which receives the Red, Green and Blue M-bit digital data signals and generates a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals; and a data driving circuit which generates Red, Green and Blue analog data signals corresponding to the plurality of gamma voltages responding to the data control signal, and supplies the Red, Green and Blue analog data signals to respective Red, Green and Blue pixels”.

As Applicants have presented above, claim 1, and claims 2-9 depend from claim 1 are patentable over Naito in view of in view of Kang.

For example, none of references fails to disclose “each of the R, G and B cells has a cathode electrode, an anode electrode and an emitting layer disposed between the cathode electrode and the anode electrode” recited in the claimed invention.

Also, none of Naito and Kang teaches “a timing controller for generating a gate control signal and a data control signal, wherein the timing controller includes a look-up table which receives Red, Green and Blue N-bit digital data signals having a same gray scale value, and converts the Red, Green and Blue N-bit digital data signals into Red, Green and Blue M-bit digital data signals respectively, wherein each of N and M is an integer, M is greater than N, and gray scale values of the Red, Green and Blue M-bit digital data signals are different from each other.” Although Naito discloses a conversion table (column 11, lines 12-23) which is read as the “look up table” by the Examiner, Naito fails to disclose the data conversion table included in a timing controller.

Lastly, Naito fails to disclose “a gamma voltage generator which receives the Red, Green and Blue M-bit digital data signals and generates a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals”. Kang discloses only “the gamma voltage generator 164 generating a gamma voltage set to have a different direct current level in accordance with a gray level value” and Naito discloses a digital gamma correction circuit 220 shown in Fig. 2. If Kang is combined with the Naito, the digital gamma correction circuit 220 of Naito converts a digital data (N bit digital data) into another digital data (M bit digital data). Accordingly, none of Naito and Kang teaches the features of the claimed invention because it is impossible to convert digital data into analog data.

Accordingly, Applicants respectfully submit that claims 1 and 11, and claims 5-10,

13-14 and 16-19 which depend from claim 1 or 11 are patentable over Naito and Kang.

Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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